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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,742	08/21/2001	Hossein Izadpanah	HRL098	9019

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TOPE-MCKAY & ASSOCIATES
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MALIBU, CA 90265

EXAMINER

NGUYEN, HUY D

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 10/06/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,742

Applicant(s)

IZADPANA, HOSSEIN

Examiner

Huy D Nguyen

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 9 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 8, 10-26 and 42-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-6, 9, 38-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Lau et al. (U.S. Patent No. 6,690,657).

Regarding claims 1, 38, Lau et al. teaches a networked and field addressable distributed antenna system comprising a large field megacell coverage area, at least a portion of which is partitioned into a plurality of short range picocells, wherein each of the picocells is serviced by a secondary base repeater node operative to receive an information signal from a neighboring secondary base repeater node or from an originating information signal source, and to receive a command signal including a direction command from an originating base station having a command signal transmitter, and to transmit the information signal in at least one of three directions for receipt by local users or by a neighboring secondary base repeater node positioned along the direction to which the information signal was transmitted, the direction in which the information signal is transmitted being determined by the direction command of the command signal, wherein the secondary base repeater nodes are positioned such that they re-broadcast the information signal to neighboring secondary base repeater nodes in a tree structure (Col. 4, lines 6-52; Col. 5, lines 31-67; Col. 6, lines 1-52; Col. 8, lines 50-67; Col. 9, lines 1-24).

Regarding claims 2, 39, Lau et al. teaches the networked and field addressable distributed antenna system as set forth in claim 1, wherein the secondary base repeater nodes are positioned such that they rebroadcast the information signal in a fan-out tree structure (Col. 5, lines 31-58; Figs. 4 & 5).

Regarding claim 3, Lau et al. teaches the networked and field addressable distributed antenna system as set forth in claim 2, wherein the megacell has an input end and an output end, and wherein the information signal may be propagated from secondary base repeater node to secondary base repeater node from an information signal source at the input end to an information signal output end receiver at the output end, with the information signal output end receiver configured to receive from a plurality of base repeater nodes at the output end of the megacell (Col. 4, lines 6-52; Col. 5, lines 31-67; Col. 6, lines 1-52; Figs. 4-7).

Regarding claims 5, 41, Lau et al. teaches the networked and field addressable distributed antenna system as set forth in claim 3, wherein the information signal output end receiver is connected with the information source by a loop back means (Figs. 5 & 7; Col. 5, lines 31-67; Col. 6, lines 1-52).

Regarding claim 6, Lau et al. teaches the networked and field addressable distributed antenna system as set forth in claim 5, wherein the loop back means is selected from the group consisting of a fiber-optic cable, a wire, and a point-to-point wireless channel (Col. 5, lines 47-57).

Regarding claim 9, Lau et al. teaches the networked and field addressable distributed antenna system as set forth in claim 1, wherein the direction command from the command signal includes a direction command for a plurality of secondary base repeater nodes in order to cause

Art Unit: 2681

the secondary base repeater nodes to transmit the information signal along a predetermined path through the megacell (Col. 8, lines 50-67; Col. 9, lines 1-24).

Regarding claim 40, Lau et al. teaches the method for distributing information to selective picocells within a megacell by using a networked and field addressable distributed antenna system, as set forth in claim 39, further comprising the step of selectively positioning the base repeater nodes such that only desired picocells within the megacell are capable of receiving the information signal (Col. 5, lines 31-67; Col. 6, lines 1-52; Figs. 4-7).

Allowable Subject Matter

3. Claims 4, 7-8, 10-26, 42-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the cited prior art fails to teach the networked and field addressable distributed antenna system as set forth in claim 3, wherein at least a portion of the secondary base repeater nodes are further configured to modify the received information signal and to re-transmit the received information signal as a modified information signal.

Regarding claim 7, the cited prior art fails to teach the networked and field addressable distributed antenna system as set forth in claim 6, wherein at least a portion of the secondary base repeater nodes are further configured to modify the received information signal and to re-transmit the received information signal as a modified information signal.

Regarding claim 10, the cited prior art fails to teach the networked and field addressable distributed antenna system as set forth in claim 1, wherein the secondary base repeater nodes

Art Unit: 2681

further comprise a command signal receiver for receiving a command signal and an information receiving antenna for receiving the information signal from a neighboring secondary base repeater node or from an originating information signal source, an amplifier for receiving the information signal from the information receiving antenna, operative for amplifying the information signal, and an information signal transmitter for receiving the amplified information signal from the amplifier and operative in response to the command signal to transmit the information signal in a direction to at least one of three picocells for receipt by local users or by the next neighboring secondary base repeater node receiving from each picocell to which the information signal was transmitted, the direction in which the information signal is transmitted being determined by the direction command of the command signal.

Regarding claim 42, the cited prior art fails to teach the method for distributing information to selective picocells within a megacell by using a networked and field addressable distributed antenna system as set forth in claim 41, further comprising the step of optionally modifying the received information signal at each secondary base repeater node prior the re-transmitting step (d).

Regarding claim 45, the cited prior art fails to teach the method for distributing information to selective picocells within a megacell by using a networked and field addressable distributed antenna system as set forth in claim 41, further comprising the step of using the looping back of the information signal for diagnostically ensuring correct path setup and for checking the path setup connection integrity within the megacell.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sivaprakasam (U.S. Patent No. 6,785,513) teaches method and system for clustered wireless networks.
- Chu et al. (U.S. Patent No. 5,890,055) teaches method and system for connecting cells and microcells in a wireless communications network.
- Eng et al. (U.S. Patent No. 6,771,933) teaches wireless deployment of bluetooth access points using a distributed antenna architecture.
- Niki (U.S. Patent No. 6,381,473) teaches distributed antenna for personal communication system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HN

Huy Nguyen

[Signature]

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600